

[Abstract]

A rotary electric machine capable of optionally adjusting output characteristic and an electric motor vehicle using the rotary electric machine are provided.

A rotary electric machine is constituted with: a rotary shaft 220; a rotor 40 connected to the rotary shaft 220; a stator 31 placed opposite the rotor 40; a stepping motor 60 serving as an adjusting motor for adjusting the position of the rotor 40 relative to the stator 31 in the rotary axis direction; and a movable member 47 or the like that is engaged to the rotor 40 and converts the rotation of the adjusting motor 60 into the displacement of the movable member 47 in the axial direction of the rotary shaft 220.